

**(9) Grounds of Rejection**

The following grounds of rejection are applicable to the appealed claims:

**NEW GROUNDS OF REJECTION**

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-10, 25, 26, 30, 31, 33 and 34 are rejected under 35 U.S.C. 101

because the claimed invention is directed to non-statutory subject matter.

Claims 1-10, 25, 26 and 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to software *per se*. The claims recite a "system" defined merely by software (computer program).

Claims 30, 33 and 34 are rejected under 35 U.S.C. 101. Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to a machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In *re Bilski et al*, 88 USPQ 2d 1385 CAFC (2008); *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps fail the first prong of the new Federal Circuit decision since they are not tied to a machine and can be performed without the use of a particular machine. Thus, claims 30, 33 and 34 are non-statutory since they may be performed within the human mind.

The mere recitation of the machine in the preamble with an absence of a machine in the body of the claim fails to make the claim statutory under 35 USC 101. Note the Board of Patent Appeals Informative Opinion Ex parte Langemyer et al.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-20, 23-29, and 31-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Block et al (hereinafter Block), U.S. Patent No. 6,377,938.

Regarding to claim 1, Block discloses an event pricing system comprising: at least one computer having:

a continuously running event creation process determining whether a system initiated and created non-usage event independent of user initiated events is due to be created and creating the non-usage event (column 7, lines 65-column 8, line 3, the processor 60 updates the subscriber's account with flat charges, monthly equipment rental fees. Note that the non-usage event independent of user initiated events is defined in the Specification as recurring event 66 (see page 11, lines 10-16) that are charges are billed on regular, recurring interval, thus flat charges and monthly equipment rental fees are recurring events); and

a continuously running pricing process pricing the system-created non-usage events an non-system-created events as they become available to the system, wherein the pricing process includes pricing the system-created non-usage events and/or the on-system-created events independent of a billing process (column 7, lines 55-column 8, lines 6, the processor 60 performs real time billing calculation for system-created events e.g., flat charges, monthly equipment rental fees, etc..., and non-system-created events:, e.g., call charges, thus the system in Block provides an up-to-date balance of charges available to the user in real time, the user does not to wait to the billing cycle to receive billing information, therefore, performing the real time billing calculation in Block is independent of a billing process).

Regarding to claim 2, Block further discloses all events are priced as they become available to the system (column 7, lines 55-column 8, lines 6).

Regarding to claim 3, Block further discloses all system-created events are created at any time based on a flexible schedule independent of a billing process (column 8, lines 1-3, flat charges, monthly equipment rental fees).

Regarding to claim 4, Block further discloses system initiated and created events for a customer may be created one of less frequently than the customer is billed, as frequently as the customer is billed and more frequently than the customer is billed (column 8, lines 1-3, flat charges, monthly equipment rental fees are initiated and created as frequently as the customer is billed).

Regarding to claim 5, Block further discloses summary events are created and maintain in real-time as events are priced (column 9, lines 15-32).

Regarding to claim 6, Block further discloses all events are available for contribution to summary records for discounting and consolidation (column 7, lines 43-50).

Regarding to claim 7, Block further discloses charges for all events that are relevant to a billing period are calculated and available in the system at the earliest practical time (column 9, lines 27-32).

Regarding to claim 8, Block further discloses processing for calculating charges to be billed in a current billing period is outside the billing process (column 7, lines 55-63).

Regarding to claim 9, Block further discloses charges for all unbilled events are ready for the billing process and ready for display on-demand (column 9, lines 15-32).

Regarding to claim 10, Block further discloses pricing process performs real-time recalculation of a charge for any unbilled event when information in the system which impact the charge has changed (column 7, lines 43-50).

Regarding to claim 11, Block discloses a computer implemented event pricing process, comprising:

determining, by a computer, whether a system initiated and created non-usage event independent of user initiated events is priceable (column 7, lines 65-column 8, line 3, the processor 60 updates the subscriber's account with flat charges, monthly equipment rental fees. Note that the non-usage event independent of user initiated events is defined in the Specification as recurring event 66 (see page 11, lines 10-16) that are charges are billed on regular, recurring interval, thus flat charges and monthly equipment rental fees are recurring events); and

pricing, by the computer, the non-usage event responsive to the determining, where the pricing includes pricing the non-usage event independent of a billing process that includes a non-system-created event (column 7, lines 55-column 8, lines 6, processor 60 performs real time billing calculation for system-created events e.g., flat charges, monthly equipment rental fees, etc..., and non-system-created events; e.g., call charges).

Regarding to claim 12, Block further discloses priceable events are price immediately (column 7, lines 55-63).

Regarding to claim 13, Block further discloses all charge events are price in real-time (column 6, lines 23-25).

Regarding to claim 14, Block discloses a computer implemented event pricing process, comprising:

determining, by a computer whether an event is priceable (column 7, lines 55-63);  
and

pricing, by a computer, the event responsive to the determining, wherein all available system initiated and created non-usage events independent of user initiated events for a current billing period are priced at a first opportunity after a prior billing period the includes non-system-created events ends (column 7, lines 65-column 8, line 3, the processor 60 updates the subscriber's account with flat charges, monthly equipment rental fees. Note that the non-usage event independent of user initiated events is defined in the Specification as recurring event 66 (see page 11, lines 10-16) that are charges are billed on regular, recurring interval, thus flat charges and monthly equipment rental fees are recurring events).

Regarding to claim 15, Block further discloses a usage event is price at a time that the usage occurs (column 7, lines 55-63).

Regarding to claim 16, Block further discloses a recurring charge is calculated after an end of a prior billing period and before the billing date for the recurring charge (column 8, lines 1-3).

Regarding to claim 17, Block further discloses a minimum or a maximum charge is calculated and captured in a summary after and end of a prior billing period and before the billing date for the recurring charge (column 7, lines 5-15).

Regarding to claim 18, Block further discloses charges for summary events are calculated on-demand at a time of charge display (column 9, lines 15-32).

Regarding to claim 19, Block discloses a computer implemented process, comprising:

determining, by a computer, whether a system initiated and created non-usage event independent of user initiated events is due to be created (column 7, lines 65-column 8, line 3, the processor 60 updates the subscriber's account with flat charges, monthly equipment rental fees. Note that the non-usage event independent of user initiated events is defined in the Specification as recurring event 66 (see page 11, lines 10-16) that are charges are billed on regular, recurring interval, thus flat charges and monthly equipment rental fees are recurring events); and

creating, by the computer, the event responsive to the determining (column 8, lines 1-3, flat charges, monthly equipment rental fees); and

pricing, by the computer the non-usage event responsive to the creating, wherein the pricing process includes pricing the system-created non-usage events and/or the on-system-created events independent of a billing process (column 7, lines 55-column 8, lines 6, processor 60 performs real time billing calculation for system-created events e.g., flat charges, monthly equipment rental fees, etc..., and non-system-created events:, e.g., call charges, thus the system in Block provides an up-to-date balance of charges available to the user in real time, the user does not to wait to the billing cycle to receive billing information, therefore, performing the real time billing calculation in Block is independent of a billing process).

Regarding to claim 20, Block further discloses system initiated and created events are created independent of other processes (column 8, lines 1-3, flat charges or monthly equipment rental fees are created independent of the process of calculating a call charge).

Regarding to claim 23, Block further discloses a recurring event is created after an end of a prior billing period and before the billing date for the recurring charge (column 8, lines 1-3, flat charges, monthly equipment rental fees).

Regarding to claim 24, Block further discloses minimum and maximum charge summary events are created after an end of a prior billing period and before the billing date for the recurring charge (column 7, lines 5-15).

Regarding to claim 25, Block discloses an event pricing system, comprising: a computer having:

a continuously running event creation process determining whether a system initiated and created non-usage event independent of user initiated events has become current (column 7, lines 65-column 8, line 3, the processor 60 updates the subscriber's account with flat charges, monthly equipment rental fees. Note that the non-usage event independent of user initiated events is defined in the Specification as recurring event 66 (see page 11, lines 10-16) that are charges are billed on regular, recurring interval, thus flat charges and monthly equipment rental fees are recurring events); and

a continuously running pricing process pricing the system-created events and non-system-created event as the become available to the system, and creating and maintaining summary events in real-time as events are priced, wherein the pricing process includes pricing the system-created non-usage events and/or the on-system-created events independent of a billing process (column 7, lines 55-column 8, lines 6, processor 60 performs real time billing calculation for system-created events e.g., flat charges, monthly equipment rental fees, etc..., and non-system-created events; e.g., call charges, thus the system in Block provides an up-to-date balance of charges available to the user in real time, the user does not to wait to the billing cycle to receive billing information, therefore, performing the real time billing calculation in Block is independent of a billing process).

Regarding to claim 26, Block discloses an event pricing system, comprising: a computer having:



a continuously running event creation process determining whether a system initiated and created event independent of user initiated event is due to be created and creating system-created events at any time base on a flexible schedule (column 7, lines 65-column 8, line 3, the processor 60 updates the subscriber's account with flat charges, monthly equipment rental fees. Note that the non-usage event independent of user initiated events is defined in the Specification as recurring event 66 (see page 11, lines 10-16) that are charges are billed on regular, recurring interval, thus flat charges and monthly equipment rental fees are recurring events); and

a continuously running pricing process, independent of a billing process, pricing of the system-created and non-system-created events as ready for the billing process and for display as they become available to the system with all events priced as they become available to the system and creating summary events as events are being priced and performing real-time recalculation of a charge for any unbilled event when information in the system which impacts charge has changed (column 7, lines 55-column 8, lines 6, processor 60 performs real time billing calculation for system-created events e.g., flat charges, monthly equipment rental fees, etc..., and non-system-created events:, e.g., call charges; column 9, lines 15-32, creating the bill based on demand of the subscriber; column 7, lines 43-50, recalculation a charge based on the discounts).

Regarding to claim 27, Block discloses an event pricing apparatus, comprising:

a source of system initiate and created non-usage events independent of user initiated events (column 6, lines 27-45, The network Routing Device 30; column 7, lines 65-column 8, line 3, the processor 60 updates the subscriber's account with flat charges, monthly equipment rental fees. Note that the non-usage event independent of user initiated events is defined in the Specification as recurring event 66 (see page 11,

lines 10-16) that are charges are billed on regular, recurring interval, thus flat charges and monthly equipment rental fees are recurring events); and

a processor pricing the non-usage events when the events are priceable, where the pricing includes pricing the non-usage event independent of a billing process that includes the user initiated events (column 6, lines 2-26, Processor 60).

Claim 28 is written in computer medium that parallel the limitations found in claim 1 discussed above, therefore is rejected by the same rationale.

Regarding to claim 29, Block discloses a system providing pricing information for on-demand billing for events, comprising:

a message queue receiving events including system initiated and created events and usage events (column 6, lines 27-45; a memory 70 includes the Tariff Memory 76 stores information relating to the system initiated and created events such as flat rate charges, the Detailed Use Record Memory 78 stores usage events such as detailed information regarding call charges); and

a processor performing a pricing process where non-usage and usage events independent of user initiated events are continuously delivered to the pricing process via the message queue and priced as they become available independent of a billing process (column 7, line 55-column 8, line 5; the Processor 60 calculates call charges (usage events) and flat charges, monthly equipment rental fees (non-usage events independent of user initiated events) in real time).

Claim 31 contains the same limitations found in claim 1 discussed above, moreover, Block further discloses: an intermittently running billing process running responsive bill cycles and customer on demand billing information requests and producing a bill using the prices events (column 5, lines 32-65).

Claim 32 contain similar limitations found in claim 1 discussed above, therefore are rejected by the same rationale.

Regarding to claim 33, Block discloses a method for a continuous real-time calculation of a bill using a computer, comprising:

executing the real-time calculation of the bill each time an event independent of a user's initiation occurs, the processing of the real-time calculation of the bill being independent of a billing process having an event responsive to the user's initiation (column 7, line 55-column 8, line 3; processor 60 calculates call charges in real time, updates the subscriber's account with flat charges, monthly equipment rental fees); and

continuously reflecting the event independent of the user's initiation on the bill and maintaining a summary total for the bill, where the bill including the event independent of the user's initiation is displayed to the user on-demand and/or is provided to the user in accordance with the billing process (column 9, lines 5-45).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 30 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Block et al (hereinafter Block), U.S. Patent No. 6,377,938.

Regarding to claim 30, Block discloses a continuous pricing process for an event-driven system, comprising:

storing events in a message queue, the events being system initiated and created events, usage events, and summary events (column 6, lines 27-45; a memory 70

includes the Tariff Memory 76 stores information relating to the system initiated and created events such as flat rate charges, the Detailed Use Record Memory 78 stores usage events such as detailed information regarding call charges, the Billing data memory 74 stores summary events such as subscriber's usable balance);

delivering the events in the message queue to a pricing process as they become available, the delivered events including events independent of user initiated events (column 7, line 55-column 8, line 3; processor 60 calculates call charges in real time, updates the subscriber's account with flat charges, monthly equipment rental fees); and

pricing the events, where the pricing includes pricing the non-usage event independent of a billing process that includes the user initiated events (column 7, lines 55-column 8, line 3; processor 60 calculates call charges in real time, updates the subscriber's account with flat charges, monthly equipment rental fees).

Block does not disclose storing one-time events. However, one-time events such as activation/cancellation fee, purchased equipment fee is well known in the art of in generating billing in telephone communication. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Block's to include the feature above for the purpose of delivering one-time events information in real-time to the subscriber.

Regarding to claim 34, Block disclose a method of continuous bill calculation using a computer, comprising:

determining whether a non-usage event independent of a user initiated event and a usage event initiated by a user are available for pricing (column 7, lines 65-column 8, line 3, the processor 60 updates the subscriber's account with flat charges, monthly equipment rental fees. Note that the non-usage event independent of user initiated events is defined in the Specification as recurring event 66 (see page 11, lines 10-16)

that are charges are billed on regular, recurring interval, thus flat charges and monthly equipment rental fees are recurring events); and

executing the pricing for the non-usage event and the usage event based on determination of availability for pricing (column 7, lines 55-column 8, lines 6, the processor 60 performs real time billing calculation for system-created events e.g., flat charges, monthly equipment rental fees, etc..., and non-system-created events:, e.g., call charges, thus the system in Block provides an up-to-date balance of charges available to the user in real time, the user does not to wait to the billing cycle to receive billing information, therefore, performing the real time billing calculation in Block is independent of a billing process).

Block does not disclose where the non-usage event is available for pricing at a first billing period and the usage event is available for pricing at a second billing period. However, Block does disclose the system performs real time billing calculation for system-created events e.g., flat charges, monthly equipment rental fees, etc..., and non-system-created events:, e.g., call charges, thus the system provides to the user real time billing information. Moreover, the non-usage event is available for pricing at a first billing period and the usage event is available for pricing at a second billing period is well known in the art. For example, the first billing period does not contain usage event because the user does not make any calls, the second period contain usage event because the user makes some calls. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Block's to include the feature above for the purpose of providing real time billing information to the user.

7. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Block et al (hereinafter Block), U.S. Patent No. 6,377,938 in view of Jagadish et al (hereinafter Jagadish), U.S. Patent No. 6,058,170.

Regarding to claims 21 and 22, Block does not disclose system initiated and created events are created according to a schedule in the system and the schedule is created and maintained by the system based on subscription information available in the system. However, Jagadish discloses system initiated and created events are created according to a schedule in the system and the schedule is created and maintained by the system based on subscription information available in the system (column 4, lines 10-20). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the feature above with Block's for the purpose of initiating and creating events based on the schedule in the system.

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